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	Application No.	**Applicant(s)**
Notice of Allowability	10/083,253	MORIWAKI ET AL.
	Examiner	**Art Unit**	
	Salman Ahmed	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE filed on 10/30/2006*.

2. ☒ The allowed claim(s) is/are *2-15 (Curently renumbered to 5-9,13, 10, 11, 14, 12 and 1-4 respectivly)* .

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

          International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

Allowable Subject Matter

1.   Claims 2-15 are allowed.

2.   The following is an examiner's statement of reasons for allowance:

The prior arts of record do not teach the following:

In regards to claim 12 the prior arts do not teach storing, by each of ingress interfaces, packet data received from input line in one of first storing units, selectively and shifting a first data portion including destination information of the packet data from the first storing unit to one of second storing units, which is paired with the first storing unit; controlling, by each of control units, one of second storing units so as to transfer the first data portion to one of third storing units, but leaving the same data in the second storing unit; selecting, by scheduler, at least one of third storing units that stores the first data portion allowed to be transferred to one of output ports; controlling, by each of control units, in response to a predetermined control signal from scheduler, one of first storing units, which is paired with second storing unit from which first data portion has been transferred, so as to transfer a remaining portion of the packet data to one of third storing units selected by scheduler; transferring, by switch unit, the first data portion and remaining portion output from selected third storing unit to one of output ports specified by the destination information of the first data portion; and controlling, by each of control units that could not receive predetermined control signal, another of second storing units so as to transfer the first data portion to one of third

storing units, thereby to replace the previous first data portion with the new first data

portion in the third storing unit.

In regards to claim 15 the prior arts do not teach each of ingress interfaces

includes plural pairs of storage units, each of pairs including a queue buffer for storing

packet data and a register capable of retransmitting stored packet data, and wherein

each of ingress interfaces further includes a buffer control unit for selecting one of pairs

to output stored packet data, the register of the selected pair storing a first data block

including header information of a packet received from one of input lines and routing

information for specifying one of output ports, the queue buffer of the selected pair

storing the remaining portion of the received packet, wherein buffer control unit controls

the selected register to output first data block to one of ingress buffers, wherein

scheduler issues an acknowledge signal to the buffer control unit if a path toward the

output port specified with the routing information of the first data block in the ingress

buffer is available to the ingress buffer, and wherein the buffer control unit controls the

selected queue buffer to output the remaining portion of the received packet to the

ingress buffer after receiving acknowledge signal, and otherwise, the buffer control unit

selects one of the other pairs of queue buffer and register to output a new first data

block from the register to one of ingress buffers, thereby to replace the previous first

data block with the new first data block in the ingress buffer.

The prior arts alone or in combination fail to jointly suggest or teach the claimed

combination of features as taught by the instant application. Therefore claims 2-15 are

to be deemed allowable over prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salman Ahmed whose telephone number is (571)272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
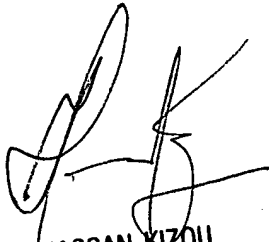
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit 2616

SA
12/10/2006

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600